



1-17603-1      EWA(k)/EBC/EWT(1)/EWT(n)/EPF(a)/EPF(b) = 1  
 HP 1000      EWT(1) = EWA(m), EPF(a) = 1, EPF(b) = 1  
 CALL EWC      IF (ABSSED - EHC(a), ASL(a) - EHT(a))  
 ACCTIME      ACP = ACP + 1      ACP = 0

AUTHORS: MAKH, S. I., PABULOVSKIY, V. F. CHILINA, S.

FILE: 100-369631-100 THE INSET WITH A SPOILER

*Schizothorax sinensis* (Steindachner, 1866)

NOTE: The above information is for informational purposes only. It is not intended to be used for any other purpose.

[illegible]

Coro 1/3

ARTICLE 1. GENERAL PRINCIPLES

The purpose of this article is to determine the conditions under which the laser is most effective. The laser was tested at a frequency of 100 Hz, and the results are shown in Table 1 of the report. The output power of the laser was plotted for several values of the input power. The results show that the output power is a function of the input power, and the relationship is shown in Figure 1. The results also show that the output power is a function of the input power, and the relationship is shown in Figure 1. The results also show that the output power is a function of the input power, and the relationship is shown in Figure 1.

ARTICLE 2

SUBMITTED BY: 1000000000

ENCLOSURE

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1000000000

1000000000

1 17602-65

1. The first part of the report is a summary of the work done during the period covered by the report. It is a brief statement of the facts and figures, and is intended to give a general impression of the work done.

2. The second part of the report is a detailed account of the work done. It is a full and complete statement of the facts and figures, and is intended to give a detailed impression of the work done.

Krypton

|         |          |         |
|---------|----------|---------|
| 1 17602 | ad - 200 | 1 17602 |
| 1 17602 | ad - 200 | 1 17602 |
| 1 17602 | ad - 200 | 1 17602 |

Copy 3/3

L 4809-  
ACCESSION KE  
A TH...  
TODIN TAG  
Card 1/3

L 48095-65

ACCESSION NR: AP5012615

the multimode beam divergence on the distance between the  
resonator mirrors obtained at a distance value in which  
at minor distances below the space

the divergence started between  
the mirrors slowly to about 0.1 at 140 cm

Card 13

L 48095-65

ACCESSION NR: AP5012615

ENCL: 00

OTHER 001

Card 3/3

MASH, D.I.; PAPULOVSKIY, V.F.; CHIRINA, L.P.

Experimental study of the divergence of the beam from a neon-helium  
laser (wavelength  $\lambda$  -  $0.63\mu$ ). Opt. i spektr. 18 no.5:866-869 My  
'65. (MIRA 18:10)



CHIRINSKIY, A. (Volgograd)

Hidden behind names. Znan.-sila 38 no.4:27 Ap '63.  
(MIRA 16:8)

RUMANIA / Chemical Technology, Chemical Products and     H  
Their Application, Part 4. - Leather, Furs,  
Gelatin, Tanning Agents, Industrial Proteins.

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 63237.

Author : Aglaia Chirita.

Inst : Iasi University.

Title : Utilization of Willow Bark for Tanning.

Orig Pub: Ind. usoara, 1958, 5, No 2, 49 - 52.

Abstract: A series of data and remarks is presented  
concerning the utilization of willow bark  
as a tanning agent according to the mater-  
ials of scientific works of the chair of  
leather technology of the Iasi University.

Card 1/1

57

|            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |    |
|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| COUNTRY    | : RUMANIA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | II |
| CATEGORY   | : Chemical Technology. Chemical Products and<br>Their Applications. Leather. Fur. Gelatine.*                                                                                                                                                                                                                                                                                                                                                                                                                                              |    |
| ABS. JOUR. | : RZKhim., No. 23 1959, No. 84529                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |    |
| AUTHOR     | : Alexa, G.; Chirita, A.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |    |
| INST.      | : Rumanian Acad.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |    |
| TITLE      | : Problems in the Application of Willow Bark<br>a Tanning Raw Material in the RDR.- Part II.                                                                                                                                                                                                                                                                                                                                                                                                                                              |    |
| ORIG. PUB. | : Studii si cercetari stiint. Acad. RPR Fil.<br>Iasi. Chim., 1958, 9, No 1, 105-114                                                                                                                                                                                                                                                                                                                                                                                                                                                       |    |
| ABSTRACT   | : This investigation covered the determination<br>of tannide content (T) in different varieties<br>of willow tree family and in particular in<br>Salix fragilis. For the latter variety the<br>following determinations were made: optimum<br>extraction temperature, T content, content of<br>sugars, the age and season when bark was col-<br>lected. Bark may be taken off the trees du-<br>ring the "vegetation" period, since T content<br>remains almost constant, while the quality<br>goes through an optimum in July, August and |    |
| CARD:      | *Tanning Materials. Industrial Proteins.<br>1/2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |    |

H - 105

COUNTRY :  
CATEGORY :

H

ABS. JOUR. : RZKhim., No. 23 1959, No. 84529

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : September. Tannides contained in willow bark  
Con'd belong to the pyrocotechnic group. For Part  
I see Ref. Zhur.-Khimiya, 1959, No 15, 55915.  
-- D. Gorin.

CARD: 2/2

ALEXA, Gheorghe, dr. ing., profesor emerit; CHIRITA, Gheorghe, conf. ing.;  
CHIRITA, Aglaia, lector ing.

The influence of acidity on the bond between formaldehyde and  
collagen. Industria uscara 10 no.2:45-47 F '63.

ALEXA, Gh.; CHIRITA, Gh.; CHIRITA, Aglaia

Contributions to the study of combined tannages. Rev  
chimie 7 no. 1: 13-20 '62.

1. Section de l'industrie du cuir, des remplaceants du  
et des matieres tannantes de l'Institut Polytechnique  
Jassy.

ALEXA, Gh.; CHIRITA, Gh.; CHIRITA, A.; MANCIU, M.; SCHIFTER, H.; NANESCU, V.

On the stability in time of physicochemical and chemical characteristics of leathers dressed by the combined formol and chromium method. Studia Univ B-E S Chem 8 no.1:509 '63

1. Iasi Polytechnic Institute.

ALEXA, Gh.; CHIRITA, Gh.; CHIRITA, A.

Influence of acidity on the stability of formaldehyde combination with collagen. Studia Univ B-B S Chem 8 no.1:510 '63

1. Iasi Polytechnic Institute.



BIRCA-GALATEANU, D.; CHIRITA, C.; DEMETRESCU, Catalina; MAVRODIN, Al.

Spectroscopic synthesis and analysis in the infrared of the structure of new diaryl sulfone-hydrazidones with anti-tuberculosis effect. Rev chimie Roum 10 no.1:83-95 Ja '65.

1. Laboratory of Physics of the Polytechnic Institute, Bucharest, and Laboratory of Organic Chemistry of the Institute of Medicine and Pharmacy, Bucharest, 19-21 Al. Sabie Street. Submitted July 4, 1964.

BIRCA-GALATEANU, D.; CHIRITA, C.; DEMETRESCU, Catalina; MAVRODIN, Al.

Synthesis and infrared spectroscopic study of the structure of some new diarylsulfone-hydrazidones with an antituberculous action. Studii cerc chim 14 no.1:83-94 Ja '65.

1. Laboratory of Physics of the Polytechnic Institute, Bucharest, and Laboratory of Organic Chemistry of the Institute of Medicine and Pharmacy, Bucharest. Submitted July 4, 1964.

CHIRITA, C.

"The genetic classification of soils and their succession in the process of solidification", p. 11, (REVISTA PADURILOR, Vol. 67, no. 10, Oct. 1952, Bucuresti)

SO: Monthly List of East European Accessions, Vol 2, no. 8, Library of Congress, August 1953, Uncl.

CHIRITA, C.

"Problems of knowledge and terminology in connection with the theory of soil fertility". p. 8, (REVISTA PADURILOR, Vol. 69, No. 2, Feb. 1954, Bucuresi, Rumania)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 3, No. 12, Dec. 1954, Uncl.

CHIRITA, C.

"The forest, best sheild to protect the soil against erosion". p. 163,  
(REVISTA PADURILOR, Vol. 69, No. 4, Apr. 1954, Bucuresi, Rumania)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 3,  
No. 12, Dec. 1954, Uncl.

CHIRITA, C.; STANESCU, C.

"Protective Layers in Forest Nurseries; Nature and the Role of Protective Strata." P. 297. (ANALELE ROMANO-SOVIETIC, Vol. 69, No. 7, July, 1954, Bucuresti, Rumania.)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 1, Jan. 1955 Uncl.

CHIRITA, C.; STANESCU, C.

"Protective strata in forest nurseries. II. Technique of applying and using protective strata." p. 406. (REVISTA PADURILOR, Vol. 69, no. 9, Sept. 1954. Bucuresti, Rumania.)

SO: Monthly List of East European Accessions, (REAL), LC.  
Vol. 4, No. 5, May 1955, Uncl.

CHIRITA, C.

"For a better ecologic foundation of our forestry. p. 3. (REVISTA PADURILOR,  
Vol. 70, no. 1, Jan. 1955. Bucuresti, Rumania.)

SO: Monthly List of East European Accessions, (EEAL), IC.  
Vol. 4, No. 5, May 1955, Uncl.



CHIRITA, C.

Oak forests to protect land from becoming swampish. p. 498. REVISTA  
PADURILOR. (Asociatia Stiintifica a Inginerilor si Technicienilor din  
Romania si al Ministerului Agriculturii si Silviculturii) Bucuresti.  
Vol. 70, no. 11, Nov. 1955.

So. East European Accessions List

Vol. 5, No. 8

August, 1956

CHIRITA, CCNST .D.

PedologieGenerală. București, Editura Agro-Silvica de Stat, 1955. 956 p.  
(General Pedology. illus., maps, footnotes, index, tables)

SOURCE: East European Accessions List (EEAL), LC, Vol. 5, No. 3, March 1956

GERNESCU, N.K. (Chornesku, N.K.); CHIRITA, C.D. (Kiritsa, S.D.).

Soil research in the Rumanian People's Republic. Pochvevedenie no.5:  
107-111 My '56. (MIRA 9:9)

1.Akademiya nauk Rymynskey Narodnoy Respubliki.  
(Rumania--Soil research)

|            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |   |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
| COUNTRY    | : Rumania                                                                                                                                                                                                                                                                                                                                                                                                                                                           | K |
| CATEGORY   | : Forestry. General Problems.                                                                                                                                                                                                                                                                                                                                                                                                                                       |   |
| ABS. JOUR. | : RZhBiol., No. 4, 1959, No. 15453                                                                                                                                                                                                                                                                                                                                                                                                                                  |   |
| AUTHOR     | : Chirita, Const.; D. Avram, Chr.; Coman, N.; *                                                                                                                                                                                                                                                                                                                                                                                                                     |   |
| INST.      | : Acad.Sci. Rumanian PR                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |
| TITLE      | : Investigation and Mapping of Forest Habitats.                                                                                                                                                                                                                                                                                                                                                                                                                     |   |
| ORIG. PUB. | : Bul. stiint. Acad. RPR. Sec. biol. si stiinte agric., 1956, 8, No.4, 847-864                                                                                                                                                                                                                                                                                                                                                                                      |   |
| ABSTRACT   | : The number of basic taxonomic units necessary for the mapping of types of habitat are explained, and criteria are given for the determination and classification of habitats. Methods of mapping are offered with an estimated number of concrete taxonomic units taken in Rumania. Results of mapping are considered for surfaces of 30 thousand hectares in the Eastern Carpathians, and an ecological scheme is presented for types of habitat in this region. |   |
| CARD:      | -- L.V. Nasmelov<br>1/1<br>* Decei, P.; Crapini, V.; Malureanu, G.; Nicolae, V.; Patrascoiu, N.; Stanciu, Gr.                                                                                                                                                                                                                                                                                                                                                       |   |

COUNTRY : Rumania  
CATEGORY : Forestry. General.

ABS. JOUR. : RZhBiol., No. 14 1959, No. 63159

AUTHOR : Chirița, Const. D.  
INST. : ~~Forest Scientific-Research Institute~~  
TITLE : The Typology and Mapping of Forest Sites in Our  
(Rumanian) Silviculture

ORIG. PUB. : Rev. pădurilor, 1957, 71, No. 8, 495-497

ABSTRACT : The problem of mapping the forest sites in Rumania is raised. Research in this direction in experimental production units of the Institute was undertaken by the efforts of the Forest Scientific-Research Institute. In the opinion of the author, at the end of five years the FS-RI will be able to roughly systematize the forest sites and give a typological description of them.

\* FS-RI

Card: 1/1

Chirita, C.; Gustiuc, L.

Soils of the Danube River delta, and their evolution. p. 241.

HIDROBIOLOGIA. (Academia Republicii Populare Romine. Comisie de Hidrologie, hidrobiologie si Ichitologie) Bucuresti, Rumania. Vol. 1, 1958.

Monthly list of East European Accessions (EPAI) LC, Vol. 8, no. 8, Aug. 1959

Uncl.

CHIRITA, C.  
SURNAME, Given Names

Country: Rumania

Academic Degrees:

Affiliation: -not given-

Source: Bucharest, Farmaeia, Vol IX, No 6, Aug 1961, pp 483-486.

Data: "Investigations on Thiazols. Note I. Synthesis of Certain Hydrazones  
with a Tuberculostatic Action."

Authors:

TEFAS, D., -Pharmacist.-

BERECHET, Ana, -Pharmacist.-

CHIRITA, C., -Pharmacist.-

PUSCARU, E., -Conf.-

870 981643

PUSCARU, E., assist. prof.; TEFAS, D.; BERECHET, Ana; CHIRITA, C.

Contributions to the study of derivatives of the thiourea type exerting  
an antitrichomonadic action. Rumanian M Rev. no.2:87-90 Ap-Je '60.  
(TRICHOMONAS pharmacology) (THIAZOLES pharmacology)



CHIRITA, C.; GUSTIUC, L.; FLOREA, N.

Pedological excursions in the regions of Banat and Crisana. II.  
Studii agr Timisoara 9 no.1/2:27-38 Ja-Je '62.

1. Membru corespondent al Academiei R.P.R. (for Chirita).

CHIRITA, C.D.

Problems of orienting soil science in Rumania. Studii agr  
Timisoara 9 no.1/2:39-62 Ja-Je '62.

1. Membru corespondent al Academiei R.P.R.

CHIRITA, C.D.

Indexes of soil moisture. Studii cerc biol veget 14 no.3:  
351-373 '62.

1. Membru corespondent al Academiei R.P.R.

CHIRITA, C. D.

Systematics of soil water conditions in Rumania. Studii cerc biol  
veget 13 no.3:405-415 '61.

1. Membru corespondent al Academiei R.P.R.

CHIRITA, Constantin, ing.

Radioactive isotopes and their application in the glassmaking industry;  
obtaining radioactive isotopes by nuclear reactions. Industria usoara  
9 no.10:423-428 0 '62.

CHIRITA, D., ing.

Rational labor organization and the use of overtime work remuneration, important measures for increasing the sugar-beet production. Ind alim 16 no.3:154-157 Mr '65.

1. Assistant Director, Giurgiu Sugar Plant.

CHIRITA, F.

TECHNOLOGY

Periodicals: METALURGIA SI CONSTRUCTIA DEMASINI. Vol. 10, no. 6, June 1958

CHIRITA, F. Development of the tractor and agricultural-machinery, an important element in the mechanization of agriculture. p. 501

Monthly List of East European Accessions (EEAI) IC, Vol. 8, No. 2;  
February 1959, Unclass.





IONESCU, E.; CHIRITA, Gh.

Ammoniation of superphosphate with gaseous ammonia on granulating plates. Rev chimie Min petr 14 no.3:130-136 Mr '63.

Country : RUMANIA / Chemical Technology. Chemical H  
 Category : Products and Their applications -- Leather.  
 Fur. Gelatine. Tanning  
 Abs. Jour : 44575 Materials. Industrial  
 Proteins  
 Author : Alexa, Gh. and Chirita, Gh.  
 Institut. :  
 Title : Studies of Combined Formaldehyde-Chrome-  
 Vegetable Tanning  
 Orig Pub. : Bul. Inst. Politehn. Iasi, 1957, 5, Nos 1-2,  
 77-90  
 Abstract : Preliminary tanning of leather by formalde-  
 hyde (I) accelerates the process of vegetable  
 tanning; however, in such a case the number  
 of tannides (T) fixated by collagen are dimin-  
 ished. To increase the affinity of collagen  
 for T, an intermediate chroming of leather  
 is conducted. The effect of intermediate  
 tanning of leather is investigated by chrome  
 salts (II) in the process of combined tanning.  
 The degree of tanning (DT) consists ( in %):

Card: 1/4

4-84

Country : RUMANIA / Chemical Technology. Chemical H  
 Category : Products and Their applications -- Leather.  
 Fur. Gelatine. Tanning  
 Abs. Jour : 44575 Materials. Industrial  
 Proteins  
 Author :  
 Institut. :  
 Title :

Orig Pub. :

Abstract : in tanning with T only, 83.62; II and T,  
 110.97; I and T, 78.53; I, II and T, 96.17.  
 As the quantity of I (40% strength) is in-  
 creased from 0.5 to 5% the DT diminishes from  
 104.83 to 90.26% when tanning with I, II and  
 T, and from 68.75 to 66.76% when tanning with  
 I and T. Pickling of leather, previously  
 turned by I, in a solution of  $H_2SO_4$  and  $NaCl$   
 increases DT; when the solution acidity in-  
 creases, the number of fixated T decreases.  
 The increase in concentration x of II solut-

Card: 3/4

Country : RUMANIA / Chemical Technology. Chemical H  
 Category : Products and Their applications -- Leather.  
 Fur. Gelatine. Tanning  
 Abs. Jour : 44575 Materials. Industrial  
 Proteins

Author :  
 Institut. :  
 Title :

Orig. Pub. :

Abstract : ions from 1 to 2.5% increases the DT from  
 99.40 to 114.71%; increasing the tannin  
 duration by II from 1 to 6 hours increases  
 the number of fixed T from 1.27 to 1.94%  
 and the DT from 94.74 to 117%. DT is in-  
 creased from 1 to 5 Be and from\* concentra-  
 tion of T solutions is increased from 1 to  
 5° Be and from 77.90 to 116.92% when the  
 tanning time is increased from 6 to 96 hours.  
 The nature of T affects an increase in DT

\*41.28 to 132.81 percent when concentration of T...

Card: 3/4

Country : RUMANIA / Chemical Technology. Chemical H  
Category : Products and Their Applications -- Leather.  
Abs. Jour : 44575 Fur. Gelatine. Tanning  
Materials. Industrial  
Proteins  
Author :  
Institut. :  
Title :

Orig Pub. :

Abstract : in the following order: chestnut, Valea,  
oak, quebracho, and sumach. G. Markus

Card: 4/4

CHIRITA, GH.; ALEXA, CH.

Study of combined formaldehyde-chromium-tannin tanning. Pt. 2, p. 357.

STUDDI SI CERTARI STIMTIPICE, SIME. Iasi, Rumania  
Vol. 8, no. 1, 1957

Monthly List of East European Accessions (EEAI) LC, Vol. 8, no. 9, Sept., 1959.

Uncl.

ALEXA, Gh.; CHIRITA, Gh.; CHIRITA, Aglaia

Contributions to the study of combined tannages. Rev  
chimie 7 no. 1: 13-20 '62.

1. Section de l'industrie du cuir, des remplaceants du  
et des matieres tannantes de l'Institut Polytechnique  
Jassy.

ALEXA, Gh.; CHIRITA, Gh.; CHIRITA, A.; MANCIU, M.; SCHIFTER, H.; NANESCU, V.

On the stability in time of physiochemical and chemical characteristics of leathers dressed by the combined formol and chromium method. Studia Univ E-F S Chem 8 no.1:509 '63

1. Iasi Polytechnic Institute.



ALEXA, Gh.; CHIRITA, Gh.; CHIRITA, A.

Influence of acidity on the stability of formaldehyde combination with collagen. Studia Univ B-B S Chem 8 no.1:510 '63

1. Iasi Polytechnic Institute.

ALEXA, Gheorghe, dr. ing., profesor emerit; CHIRITA, Gheorghe, conf. ing.;  
CHIRITA, Aglaia, lector ing.

The influence of acidity on the bond between formaldehyde and  
collagen. Industria uscara 10 no.2:45-47 F '63.

CHIRITA, Mihai

Use of artificial satellites in navigation. Rev transport 11  
no.12:547-548 D '64.

*Chirita, N.*

POPOVICI, V. V.  
SURNAME (in case); Given Names

Country: Rumania

Academic Degree: Engineer

Affiliation: Research Institute for the Cultivation of Corn (Institutul de Cercetari pentru Cultura Porumbului)

Source: Bucharest, *Probleme In tehnica si Veterinara*, No 4, 1961, pp 11-18.

Date: "Organisation of the Green Corn Conveyor for Bulls."

Co-authors:

BEHEA, I., Engineer, Research Institute for the Cultivation of Corn (Institutul de Cercetari pentru Cultura Porumbului).  
STANESCU, I., Engineer, Research Institute for the Cultivation of Corn (Institutul de Cercetari pentru Cultura Porumbului).  
STANESCU, I., Engineer, Research Institute for the Cultivation of Corn (Institutul de Cercetari pentru Cultura Porumbului).  
CHIRITA, N., Engineer, Research Institute for the Cultivation of Corn (Institutul de Cercetari pentru Cultura Porumbului).

CHIRITA, P.

PAVEL, V., Dr.; BIKSZ-WEISS, A., dr.; CHIRITA, P., dr.; DINU, I., dr.;  
CZERNIK, I., dr.

Study of the effect of mercurial diuretics on cardiac  
decompensation. Med. int., Bucur. 4 no.8:1220 1225 Dec 56.

1. Lucrare efectuata la Clinica a II-a medicala (Dir.: prof.  
A. Paunescu-Podeanu) I.M.F. - Timisoara.

(CONGESTIVE HEART FAILURE, therapy  
mercurial diuretics, mechanism of action, side-effects  
& resist.)

(DIURETICS, MERCURIAL, ther. use  
congestive heart failure, mechanism of action, side-  
effects & resist.)

*Chirita, P.*

PAVEL, V.; CHIRITA, P.; PALCOIANU, A.

Studies of the effect of oxygen and nitroglycerin on post-insulin ECG changes. Med. int., Bucur. 9 no.11:1683-1693 Nov 57.

1. Incrare facuta in Clinica a II-a medicala I.M.F., Timisoara.  
(ELECTROCARDIOGRAPHY, eff. of drugs on  
insulin, alone & with oxygen & nitroglycerin)  
(INSULIN, effects  
on ECG, alone & with oxygen & nitroglycerin)  
(OXYGEN, effects  
on ECG after insulin admin.)  
(NITRITES, effects  
nitroglycerin, on ECG after insulin admin.)

PAUNESCU-PODEANU, A., prof.; GEORGESCU, I., dr.; HAMMER, A., dr.; MICLEA, F.,  
dr.; Munteanu, M., dr.; RODULA, P., dr.; DINU, I., dr.; DANCAU, G.,  
dr.; CHIRITA, P.

Phenylbutazone as an adjuvant in the therapy of myocardial infarct.

Med. intern., Bucur 13 no.4:533-539 Ap '61.

(MYOCARDIAL INFARCT therapy) (PHENYLBUTAZONE therapy)

PAUNESCU-PODEANU, A., prof.; RADULA, P., dr.; CHIRITA, R., dr.

Acute abdomen, apparently surgical, as the expression of a degenerative rheumatism of the spinal column. Med. intern. 14 no.12:1513-1514 D '62.

1. Clinica medicala, I.M. Timisoara.  
(ARTHRITIS, RHEUMATOID) (SPINAL DISEASES)  
(ABDOMEN, ACUTE)



SMIRNOV, V.S.; CHIRITA, V.

Influence of the inertia force on metal rolling by rolling  
mill cylinders. Studii cerc metalurgie 9 no.2:205-221 '64.

SMIRNOV, V.S.; CHIRIKIN, V.

Effect of inertia forces on rolls gripping the metal. Izv Akad  
metallurgii 9 no.2:245-260 '64.

1. Corresponding Member of the Academy of Sciences of the U.S.S.R.  
(for Smirnov).

ACCESSION NR: AP5017592

RU/0017/64/000/007/0285/0292

AUTHOR: Smirnov, V. S. (Professor, Doctor, Corresponding member  
Chirita, V. (Candidate of technical sciences)

TITLE: Using the dimensional theory to determine the elongation  
rolling of rotational sections in open calibers

SOURCE: Metallurgia, no. 7, 1964, 285-290

TOPIC TAGS: metal strain, metal plasticity, metal rolling

ABSTRACT: The authors continue their application of dimensional  
processing of experimental data relating to the plastic strain  
from the establishment of the elongation coefficient for a given  
periodical section. They deduce some general formulae for the  
elongation coefficient in caliber rolling. Orig. art. has 14  
14 formulae.

ASSOCIATION: Elipila 7 I.C.T.C.Y.

SUBMITTER:

ENCL: 01

NR REF. SERV. 12

OTHER: 000

012

Card 1/1

L 41109-66 EWP(k)/EWP(t)/ETI IJP(c) JD/HW

ACC NR: AP6030198

SOURCE CODE: RU/0017/65/000/007/0345/0350

AUTHOR: Chirita, V. (Engineer; Candidate of technical sciences)

ORG: Technological Research Institute for Machine Building (Institutul de cercetari tehnologice pentru constructii de masini)

TITLE: Determining the working diameter for burred and burrless caliber rolling

SOURCE: Metalurgia, no. 7, 1965, 345-350

TOPIC TAGS: metal rolling, metallurgic process

ABSTRACT: The author shows how to calculate the working diameter for burred and burrless caliber rolling by means of the equivalent section method, and points out the advantages of this method which include relatively high accuracy as compared to other methods, rapidity and ease of the calculations required. The method is also applicable to periodic section rolling. A numerical example of the calculations is included. Orig. art. has: 6 figures, 14 formulas and 1 table. [Based on author's Eng. abst.] [JPRS]

SUB CODE: 13 / SUBM DATE: none / ORIG REF: 005 / SOV REF: 004

Card 1/1

11b

UDC: 621.77.2

09/81042

L 46908-66 EWP(t)/ETI/EWP(k) IJP(c) JD/HW/DJ

ACC NR: AP6034311

SOURCE CODE: RU/0017/66/000/002/0065/0069

AUTHOR: Chirita, V. (Doctor; Engineer)

ORG: Technological Research Institute for Machine Building (Institutul de Cercetari Tehnologice Pentru Constructii de Masini)

TITLE: Some problems of advance in the folling of profiles

SOURCE: Metalurgia, no. 2, 1966, 65-69

TOPIC TAGS: metal rolling, metallurgy

ABSTRACT: In a discussion of the problems associated with the forward movement of profiles with a variable degree of filling of the rolled pieces, the author shows that the basic principles of rolling theory and variation of advance speed are in fact applied in practical experience. This can be seen by extending the analysis of the various factors affecting the advance to the component parts of the variable-thickness pieces. Orig. art. has: 6 figures, 10 formulas and 1 table. [Based on author's Eng. abst.] [JPRS: 36,867]

SUB CODE: 13 / SUBM DATE: none / ORIG REF: 003 / SOV REF: 007  
OTH REF: 001

Card 1/1 fv

UDC: 621.771.2-42

0981 0032

CHIRITESCU, A.

"Experience with crop rotation in nurseries." p. 16. (REVISTA PADURILOR, Vol. 68, no. 11, Nov. 1953, Bucuresti, Rumania)

SO: Monthly List of East European Accessions, L. C., Vol. 3, No. 4, April 1954, Uncl.

CHIRITESCU, A.

"Importance of field shelter belts for the increase of harvests in connection with new trends in agriculture." p. 24. (REVISTA PADURILOR, Vol. 68, no. 12, Dec. 1953, Bucuresti, Rumania)

SO: Monthly List of East European Accessions, L. C., Vol. 3, No. 4, April 1954, Uncl.

CHIRITESCU, A.

"From the practice of stratifying tree seeds in nurseries of the central steppe of Dobruja". p. 24, (REVISTA PADURILOR, Vol. 69, No. 2, Feb. 1954, Bucuresi, Rumania)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 3, No. 12, Dec. 1954, Uncl.



CHIRITESCU, A.

"Culture of perennial grasses in nurseries of the central steppe of Dobruja". p. 111, (REVISTA PADURILOR, Vol. 69, No. 3, Mar. 1954, Bucuresi, Rumania)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 3, No. 12, Dec. 1954, Uncl.

CHIRITESCU, A.

Forest shelter belts established in the central steppe of Dobruja in  
1950-1954. p. 328. REVISTA PADURILOR. Bucuresti. Vol. 70, no. 8, Aug. 1955.

SOURCE: East European Accessions List (EEAL), LC, Vol. 5, no. 3, March 1956

CHIRITESCU, A.

"Development of production by means of capillary action in steppe nurseries, p. 410,  
(REVISTA PADURILOR, Vol. 69, no. 9, Sept. 1954. Bucuresti, Rumania.)

SO: Monthly List of East European Accessions, (KEAL), LC.  
Vol. 4, No. 5, May 1955, Uncl.

CHIRITESCU, A.

Forest problems of the Black Sea littoral. p. 512. REVISTA PADURILOR.

(Asociatia Stiintifica a Inginerilor si Technicienilor din Romania si al  
Ministerului Agriculturii si Silviculturii) Bucuresti. Vol. 70, no. 11,  
Nov. 1955.

So. East European Accessions List Vol. 5, No. 8 August, 1956

CHIRITESCU, A.

Fixing of sand on the shores of Mamaia. p. 78. REVISTA PADURILOR.

(Asociatia Stiintifica a Inginerilor si Technicienilor din Rominia si al  
Ministerului Agriculturii Si Silviculturii) Bucuresti. Vol. 71, no. 2,  
Feb. 1956.

So. East European Accessions List

Vol. 5, No. 9

September, 1956

CHIRITESCU, A.

Unique plan for crop rotation in nur-suries for ornamental trees and shrubs. p. 91.  
(REVISTA PADURILOR. Vol. 71, no. 2. Feb. 1957. Rumania)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 7, July 1957. Uncl.

Page 78

CHIRITESCU, A.

The necessity of forest shelter belts in the Dobruja. p. 442

(REVISTA BODURILOR. Vol. 71, No. 7, July 1957. Bucuresti, Rumania)

SO:, Monthly List of East European Accessions (EEAL) LC. Vol. 6, No. 10, October 1957. Uncl.

CHIRITESCU, A.

Formula for establishing the surface of nurseries taking into consideration the growing speed of seedings. p. 537

REVISTA PADURILOR. (Asociata Stiintifica a Inginerilor si Technicienilor din Romania si Ministerul Agriculturii si Silviculturii) Bucuresti, Rumania. Vol. 73, no. 9, Sept. 1958

Monthly list of East European Accessions (EEAI) LC Vol 8, No. 6, June 1959  
Uncl.



CHIRITESCU, A.

AGRICULTURE:

PERIODICAL: Vol. 73, no. 10, Oct. 1958

CHIRITESCU, A. The formula for determining the yearly cultivation surface in nurseries, taking into consideration the growing speed of seedlings. p. 595

Monthly List of East European Accessions (EEAI) LC Vol. 8, No. 4  
April 1959, Unclass

L 1202-66

~~ACCESSION~~ NR: AP5025838

RU/0004/65/000/003/0083/0088

AUTHOR: Saviuc, Victor (Engineer, Chief researcher) (Iasi); Chiritescu, Dan (Engineer, Head of workshop installation) (Iasi); Dordea, Dionisie (Engineer, Chief Planner) (Iasi) 23

TITLE: Mobile transformer stations

SOURCE: Electrotehnica, no. 3, 1968, 83-88

TOPIC TAGS: electric transformer, electric power engineering

ABSTRACT: A survey on the design and construction of mobile transformer stations, both in Rumania and in other countries. Technical data and design details are presented, especially on 240 kilovolt-ampere-6/0.4 kilovolt transformer centers. Orig. art. has: 9 figures.

ASSOCIATION: [Saviuc] Centrul de cercetari tehnice al Academiei RPR (Technical Research Center of the RPR Academy); [Chiritescu] DSAPC; [Dordea] IRE

SUBMITTED: 25Dec63

ENCL: 00

SUB CODE: EE

NR REF SOV: 001

OTHER: 005

JPRS

Card 1/1

MANOLESCU, Radu, ing.; VARIAN, Radu N., ing.; CHIRITESCU, Gheorghe, ing.

Problem of the bearing capacity and calculation of road systems,  
as discussed at The First Road Conference of the Socialist  
Countries, Moscow, June 4-13, 1962. Rev transport 10 no.2:  
49-47 F '63.

CHIRITESCU, Gheorghe, ing.; IONESCU, Alexandru, ing.; VARLAN, Radu, ing.

Problem of earthworks and their stability, discussed  
by the First Conference on Toads of the Socialist Countries,  
Moscow, June 4-13, 1962. Rev transport 10 no.1:1-8 Ja '63.

L 7857-66 EWT(1)/EWP(s)/EPA(s)-2/EWT(m)/EWP(w)/EWP(1)/EPA(w)-2/T/EWP(t)/EWP(b)

ACC NR: AP5028130 EWA(h) IJP(c) JD/ SOURCE CODE: UR/0048/65/029/011/2101/2103

AUTHOR: Zhukov, O.K.; Nilovskova, S.D.; Chirkov, A.N.

ORG: Voronezh State University (Voronezhskiy gosudarstvennyy universitet)

TITLE: Concerning temperature autostabilization of ferroelectric ceramics /Report, Fourth All-Union Conference on Ferro-electricity held at Rostov-on-the Don 12-16 September 1964/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 29, no. 11, 1965, 2101-2103

TOPIC TAGS: ferroelectric material, ceramic material, solid solution, barium titanate, strontium titanate, Curie point, dielectric constant, dielectric loss, heating, temperature stabilization

ABSTRACT: The temperature stabilization of ferroelectric materials by dielectric heating at a temperature slightly above that at which the dielectric loss is maximum, first observed by L.A.Shuvalov (Izv. AN SSSR. Ser. fiz. 24, No. 11, 1416 1960)) in triglycine sulfate, was investigated in a series of ceramic solid solutions of barium and strontium titanates. Ceramic specimens containing 10, 15 and 20 % by weight  $\text{SrTiO}_3$  and having Curie points of 87, 67, and  $47^\circ\text{C}$ , respectively, in the form of 5 mm diameter, 2 mm thick disks with small central recesses to receive thermocouple junctions for temperature measurement were provided with fired on silver electrodes. The dielectric constants were measured at 15 kilocycle/sec with a bridge; the imaginary

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ACC NR: AP5028130

8

parts of the dielectric constants showed sharp maxima at temperatures  $4-5^{\circ}$  below the respective Curie points. The specimens were dielectrically heated with a 200 W, 15 kilocycle/sec audio oscillator while there temperatures were measured to  $0.01^{\circ}$  with a thermostat. Optimum stabilization was obtained at a temperature  $1-2^{\circ}$  above that at which the dielectric loss was maximum ( $3-4^{\circ}$  below the Curie point). A stabilization factor  $dT/dt$  ( $T$  is the ambient temperature and  $t$  is the specimen temperature) of 5 was achieved with the highest Curie point material over the range  $20^{\circ} < T < 80^{\circ}\text{C}$ , and factors 3 with the other two materials. The stabilization factor was always greatest at the lower ambient temperatures. It is concluded that not only triglycine sulfate single crystals, but also barium titanate base ceramics can be temperature stabilized near the Curie point by dielectric heating, and it is suggested that similar experiments be performed with other ferroelectric ceramics.<sup>15</sup> The authors thank I.S. Zheleznov and L.A. Shuvalov for their interest in the work and for valuable remarks. Orig. art. has: 2 figures and 1 table.

SUB CODE: SS, EM, TD

SUEM.DATE: 00/

ORIG. REF: 002

OTH. REF: 001

  
Card 2/2

ZHUKOV, O.K.; MILOVIDOVA, S.D.; CHIRKIN, A.N.

Thermal self-stabilization in ferroelectric ceramics. Izv.  
AN SSSR. Ser. fiz. 29 no.11:2101-2103 N '65.

(MIRA 18:11)

1. Veronezhskiy gosudarstvennyy universitet.

CHIRKIN, A. P.

1756. EFFECT OF ASH AND DUST ON LOCOMOTIVE EFFICIENCY. Chirkin, A. P. (Za Ekonomiyu Topliva (Fuel Economy), No.8, 1947, 4010).

Locomotive efficiency depends largely on fuel size, proportion of fines, constancy of calorific value and combustion. The author considers that the definition of these factors is possible only by special methods and that other factors have to be taken into consideration in judging the suitability for a given type of coal for engine firing, e.g. (1) the specific boiler rating (2) possibility of prolonged intensive firing without cleaning. Another factor should also be worked out, based on fuel economy and intensity of combustion in the steady state, owing to the interrelation between engine boiler design and fuel quantity. The author has worked out a series of physico-chemical parameters and equations to express some of these relations. Tables and graphs are given to show how these theoretical data work out in practice.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

| SUBJECT |   | AUTHOR |   | TITLE |   | JOURNAL |   | YEAR |    | VOLUME |    | PAGE |    | ISSN |    |
|---------|---|--------|---|-------|---|---------|---|------|----|--------|----|------|----|------|----|
| 1       | 2 | 3      | 4 | 5     | 6 | 7       | 8 | 9    | 10 | 11     | 12 | 13   | 14 | 15   | 16 |



CHIRKIN, A. P.

21963 CHIRKIN, A. P. O Sisteme Kachestvennykh Kharakteristik ughey i antratsitov  
Donbassa. Trudy Khar'k. in-ta inzhenerov zh.-d transporta im. Kirova, VVP.  
20, 1949, s. 22-56.

SO: Letopis' Zhurnal'nykh Statey, No. 29, Moskva, 1949

"APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308820012-7



APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000308820012-7"

CHIRKIN, ALEKSEY PETROVICH.

~~Khar'kov Inst of Engineers of Railroad Transport imeni Kirov.~~

CHIRKIN, Aleksey Petrovich. Khar'kov Inst of Engineers of Railroad Transport imeni Kirov. Academic degree of Doctor of Technical Sciences, based on his defense, 1 December 1955, in the Council of Power Engineering Inst imeni Krzhizhanovskiy, Acad Sci USSR, of his dissertation entitled: "Combined torch-layer [fakel'no-sloyevoy] process of combustion of solid fuel in high-tension furnaces (of the steam engine type)."

Academic degree and/or title: Doctor of Sciences

SO: Decisions of VAK, List no. 6, 17 Mar 56, Byulleten' MVO SSSR, No. 3, Feb 57, Moscow, pp. 23-35, Uncl. JPRS/NY-512

SOV/124-58-10-10877

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 10, p 22 (USSR)

AUTHOR: Chirkin, A. P.

TITLE: On the Intensification of Solid Fuel Burning (K voprosu ob intensifikatsii szhiganiya tverdogo topliva)

PERIODICAL: Tr. Khar'kovsk. in-ta inzh. zh.-d. transp., 1957, Nr 30, pp 3-7

ABSTRACT: The author records basic formulas describing the burning of solid fuel in a layer and in a pulverized suspension. Analyzing the influence of different factors on the intensity of burning the author arrives at a conclusion that the layer process affords the maximum intensification of burning and enumerates the basic ways of intensification.

V. V. Smirnov

Card 1/1

SOV/96-58-6-24/24

AUTHOR: Chirkin, A.P. Dr.Tech.Sci. and Bartosh, B.T., Cand.Tech.Sci.

TITLE: ~~Concerning Prof. N.I. Belokon's book "Thermodynamics".~~  
(O knige prof. N.I. Belokonya "Termodinamika")

PERIODICAL: Teploenergetika, 1958, No.6. pp. 93-96 (USSR)

ABSTRACT: In Teploenergetika No.9., 1955, G.N. Fuks gave an unfavourable review of the above book. The present contributors consider that the original reviewer did not properly evaluate the book, which is of original outlook and very useful; this is explained at length. There is an editorial note that the matter requires further discussion.

1. Literature--USSR 2. Thermodynamics

Card 1/1

USCOMM-DC-55487

CHIRKIN, A.P., doktor tekhn. nauk, prof.

Method of calculating the combined jet-layer process of burning  
hard fuel in fireboxes. Trudy KHIIT no. 29:71-87 '58. (MIRA 11:8)  
(Locomotives--Fuel consumption)

CHIRKIN, A.P., doktor tekhn. nauk, prof.

Zonal calculation of the combined jet-layer process of burning  
hard fuel in fireboxes. Trudy KHIIT no. 29:88-103 '58. (MIRA 11:8)  
(Locomotives--Fuel consumption)

CHIRKIN, A.P., doktor tekhn.nauk, prof.; DROBYZKO, dotsent, kand.tekhn.nauk;  
KOROTKICH, P.T., kand.tekhn.nauk; SURZHENKO, Z.I., inzh.

Investigating the performance of the fuel system of 2D100 diesel  
locomotive engine at low feeds. Trudy KHIIT no.35:4-12 '60.  
(MIRA 13:10)

(Diesel engines--Fuel systems)



CHIRKIN, A.P., doktor tekhn.nauk, prof.; DROBYAZKO, S.I., kand.tekhn.nauk,  
dotsent; KLEPACH, P.T., kand.tekhn.nauk; SURZHENKO, Z.I., inzh.

Investigating the deformations of the fuel injector body of the 2D100  
engine. Trudy KHIIT no.35:50-54 '60. (MIRA 13:10)  
(Diesel engines--Fuel systems)

CHIRKIN, A.P., doktor tekhn.nauk, prof.; VERNER, N.D., inzh.; GAVRILENKO,  
M.K., inzh.; DROBYAZKO, S.I., kand.tekhn.nauk, dotsent

By-pass system for the pressure-charging air of 2D100 locomotive  
diesel engines. Trudy KHIT no.35:138-143 '60. (MIRA 13:10)  
(Diesel engines)

CHIRKIN, A. P., doktor tekhn. nauk, prof.; GAVRILENKO, M. K., kand.  
tekhn. nauk

Results of the testing of the 2D100 engine equipped with by-pass  
and throttle systems and modernized fuel pumps. Trudy KHIIT  
no. 52:16-23 '61. (MIRA 15:10)

(Diesel engines—Fuel systems)

CHIRKIN, A. P., doktor tekhn. nauk, prof.; GAVRILENKO, M. K., kand.  
tekhn. nauk; POLTAVSKIY, I. P. inzh.

Measuring the temperature of collector plates and windings of  
the auxiliary poles of diesel locomotive electric traction  
engines during the movement of the train. Trudy KHIIT no. 52:  
44-55 '61. (MIRA 15:10)

(Electric railway motors--Testing)  
(Thermistors)

CHIRKIN, A. P., doktor tekhn. nauk, prof.; GAVRILENKO, M. K., kand.  
tekhn. nauk; VERNER, N. D., inzh.

Investigating the characteristics of fuel feed by the fuel pump  
of the 2D100 engine with modified cutting-off edges of the pump  
piston. Trudy KHIIT no.52:5-15 '61. (MIRA 15:10)

(Diesel engines--Fuel systems)  
(Pistons--Testing)

CHIRKIN, A.P., doktor tekhn. nauk, prof.; REZNIK, I.I., insh.;  
CHAROMSKIY, A.D., doktor tekhn. nauk, prof., retsenzent;  
VASIL'YEVA, N.G., insh., red.; UVAROVA, A.F., tekhn.red.

[Diesel-engine fuel systems] Disel'naya toplivnaya ap-  
paratura; spravochnik. Moskva, Mashgiz, 1963. 169 p.  
(MIRA 16:11)

(Diesel engines--Fuel systems)

L 13560-65

EEO-2/EWT(1)/EED-2/FCS(k)

Pn-4

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ACCESSION NR: AP4048264

S/0141/64/007/004/0693/0700

AUTHORS: Akhmanov, S. A.; Komolov, V. P.; Chirkin, A. S.

TITLE: Quantization in the investigation of nonstationary phase distributions

SOURCE: IVUZ. Radiofizika, v. 7, no. 4, 1964, 693-700

TOPIC TAGS: quantizer, parametric oscillator, random phase spread, signal noise ratio

ABSTRACT: This is a continuation of earlier work [1, 2].  
(1) Akhmanov, S. A. -- Radiofizika, v. 4, 1961, 117-118.  
(2) Akhmanov, S. A. -- MGU ser. fiziki no. 3, 28, 1964.  
Quantization in the investigation of non-stationary phase distributions is illustrated with a simple example, namely the phase quantizer with fixed reference frequency and unknown frequency. In this case the measured phase is a non-stationary

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ACCESSION NR: AP4048264

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ary random process with a mean value that depends linearly on the time. The quantizer used was a single-circuit pulse and the results of the test set-up is shown in Fig. 1. The bipolar pulses occurring when the input signal is started in the presence and absence of the signal are described. After the analysis of the results it is shown that the regularity of the appearance of the bipolar pulses yields information about the signal, if use is made of either the pulse spectrum or the phase of the signal. It is shown that if the input signal is a random process at the quantizer input, information can be obtained about the amplitude, and if the ratio exceeds 1 or 2, then the phase (or frequency) of the quantized signal. The authors are grateful to V. B. Braginskiy and I. T. Trofimenko for useful discussions.

Core 2/4





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ACCESSION NR: AP4048264

ENCLOSURE: 01

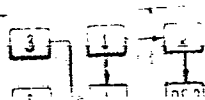


Fig. 1. Block diagram of setup for the investigation of

1 - pulse generator, 2 - amplifier, 3 - pulse generator, 4 - test object, 5 - pulse generator, 6 - parallel circuit, 7 - voltmeter, 8 - amplifier, 9 - amplifier, 10 - amplifier, 11 - carrier generator, 12 - amplifier, 13 - amplifier, 14 - amplifier, 15 - amplifier, 16 - amplifier, 17 - amplifier, 18 - amplifier, 19 - amplifier, 20 - amplifier, 21 - amplifier, 22 - amplifier, 23 - amplifier, 24 - amplifier, 25 - amplifier, 26 - amplifier, 27 - amplifier, 28 - amplifier, 29 - amplifier, 30 - amplifier, 31 - amplifier, 32 - amplifier, 33 - amplifier, 34 - amplifier, 35 - amplifier, 36 - amplifier, 37 - amplifier, 38 - amplifier, 39 - amplifier, 40 - amplifier, 41 - amplifier, 42 - amplifier, 43 - amplifier, 44 - amplifier, 45 - amplifier, 46 - amplifier, 47 - amplifier, 48 - amplifier, 49 - amplifier, 50 - amplifier, 51 - amplifier, 52 - amplifier, 53 - amplifier, 54 - amplifier, 55 - amplifier, 56 - amplifier, 57 - amplifier, 58 - amplifier, 59 - amplifier, 60 - amplifier, 61 - amplifier, 62 - amplifier, 63 - amplifier, 64 - amplifier, 65 - amplifier, 66 - amplifier, 67 - amplifier, 68 - amplifier, 69 - amplifier, 70 - amplifier, 71 - amplifier, 72 - amplifier, 73 - amplifier, 74 - amplifier, 75 - amplifier, 76 - amplifier, 77 - amplifier, 78 - amplifier, 79 - amplifier, 80 - amplifier, 81 - amplifier, 82 - amplifier, 83 - amplifier, 84 - amplifier, 85 - amplifier, 86 - amplifier, 87 - amplifier, 88 - amplifier, 89 - amplifier, 90 - amplifier, 91 - amplifier, 92 - amplifier, 93 - amplifier, 94 - amplifier, 95 - amplifier, 96 - amplifier, 97 - amplifier, 98 - amplifier, 99 - amplifier, 100 - amplifier.

AKHMANOV, S.A.; CHIRKIN, A.S.

Detection of the phase fluctuations of multiple-mode generators in  
a nonlinear medium. Izv.vys.ucheb.zav.; radiofiz. 8 no.3:569-578  
'65. (MIRA 18:8)

1. Moskovskiy gosudarstvennyy universitet.

L 4212-66 EWT(1)

ACCESSION NR: AP5025161

UR/0188/65/000/005/0078/0088  
621.371

AUTHOR: Akhmanov, S. A.; Chirkin, A. S.

TITLE: Line spectrum transformation in media with quadratic nonlinearity

SOURCE: Moscow. Universitet. Vestnik. Seriya III. Fizika, astronomiya, no. 5, 1965, 78-88

TOPIC TAGS: electromagnetic wave phenomenon, electromagnetic wave scattering, harmonic oscillation, anisotropic medium, line spectrum, frequency conversion

ABSTRACT: The paper gives the results of a theoretical analysis of frequency conversion in a line spectrum with width  $\Omega\Delta = N\Delta\omega$  which is grouped close to the frequency  $\omega_0(\Delta\omega/\omega_0 \ll 1)$  in a medium with quadratic polarizability. Particular attention is given to the effect which phase distribution in the fundamental grouped near the frequency  $2\omega_0$  has on the radiative power of the second harmonic. Calculations are made both for regions of low conversion efficiency and for conditions in which the power of the fundamental radiation and the second harmonic are comparable. A system of equations is derived for the amplitudes and phases of electromagnetic waves propagated in a weakly nonlinear anisotropic nondissipative dispersing medium. All the

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